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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/620,248

07/20/2000

Evert E. DeBoer

71493-688

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12/27/2004

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EXAMINER

SAM, PHIRIN

ART UNIT

PAPER NUMBER

2661

DATE MAILED: 12/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/620,248

Applicant(s)

DEBOER ET AL.

Examiner

Phirin Sam

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-8,10-20,22-25 and 27-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-8,10-20,22-25,27-37,42-44 and 46-57 is/are allowed.
- 6) ☒ Claim(s) 38-41 and 45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_



PHIRIN SAM  
PRIMARY EXAMINER

## **DETAILED ACTION**

### ***Claims Cancellation***

1. The request for cancel claims 1, 9, 21, and 26 without prejudice or disclaimer has been noticed and entered.

### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 38-41 and 45 are rejected under 35 U.S.C. 101 because they are directed to non-statutory subject matter.

An invention may be patented only if it falls within one of the four statutory classes of subject matter of 35 U.S.C. § 101 with an exception to the judicially determined subject matter such as laws of nature, mathematical algorithms, scientific principles, physical phenomena, and abstract ideas. Some indirect evidence that congress intended to limit patentable subject matter to physical things and steps is found in 35 U.S.C. § 112, sixth paragraph in the MPEP. The sixth paragraph states that an element in a claim for a combination may be expressed as a “means or step” for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be constructed to cover the corresponding “structure, material, or acts described in the specification and equivalents thereof.” This indicates that a limitation will normally recite “structure, material, or acts.” “Structure” and “material” indicate tangible physical things made of matter, not energy. “A data frame comprising: a transport overhead; and a Synchronous Payload Envelope (SPE), the SPE comprising a path overhead and a payload; Wherein protect switching data is inserted within the path overhead” or “A data

Art Unit: 2661

frame” does not fit within the type of subject matter that was intended to be patented. If “A data frame comprising: a transport overhead; and a synchronous payload envelope (SPE), the SPE comprising a path overhead and a payload; Wherein protection switching data is inserted within the path overhead” or “A data frame” is interpreted as an abstract arrangement “to be” transmitted, rather than a physical signal in transit between a transmitter and receiver, the signal would not fit into any of the four statutory categories because it has no physical existence. Furthermore, it would fit within the judicially recognized exception for “abstract ideas” and is nonstatutory for this additional reason. Having discussed above, a physical signal does not fit clearly within one of the three exclusions of “laws of nature, natural phenomena or abstract ideas.” As illustrate, the electromagnetic wave or voltage carries a signal is a form of natural phenomena, but the signal being carried is not naturally occurring. Some subject matter may not fall within the four statutory classes of 35 U.S.C. § 101 or within one of the exceptions. For the reasons stated above, the examiner concludes that “a data frame comprising: a transport overhead; and a synchronous payload envelope (SPE), the SPE comprising a path overhead and a payload; Wherein protection switching data is inserted within the path overhead” or “A data frame” of claims 38-41 and 45 is not statutory subject matter under 35 U.S.C. § 101 because it is an abstract idea or because it does not fit within any of the statutory classes. It is noted that electrical signals had been around for a long time prior to the 1952 Act as evidenced by claim 8 in O’Reilly v. Morse, 56 U.S. (15 How.) 62 (1854) to the use of electromagnetism for printing intelligible characters at any distances.

Art Unit: 2661

*Allowable Subject Matter*

4. Amended claims 2, 4, 5, 7, 8, 10, 12-16, 22, 24, 25, 27, 28, 30-37, and claims 3, 6, 11, 17-20, 23, 29, 42-44, 46-57 are allowed.

*Response to Arguments*

5. Applicant's arguments filed August 13, 2004 have been fully considered but they are not persuasive because of the following explanations:

**Regarding claims 38-41 and 45**, applicants argued that the data frame in claim 38 is a physical entity. The examiner respectfully disagrees with this argument since the limitation "protection switching data (signal) is inserted within the path overhead" of the frame is transmitted to the destination and does not perform any functionality or act anything by itself during the transmission. The sixth paragraph states that the element in the claim may be expressed as the means or step for performing the **specific function** without the recital of structure, material, or **acts** in support thereof. Therefore, Claims 38-41 and 45 still stand the rejection.

*Conclusion*

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 2661

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

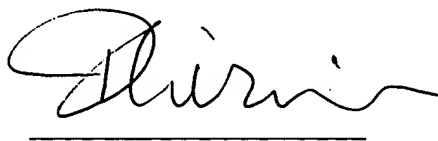
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phirin Sam whose telephone number is (571) 272-3082. The examiner can normally be reached on Mon-Fri, 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth N Vanderpuye can be reached on (571) 272 - 3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Respectfully submitted,

Date: December 20, 2004

A handwritten signature in cursive script, appearing to read 'Phirin Sam', written in black ink. The signature is fluid and stylized, with a long horizontal stroke at the end.

**PHIRIN SAM  
PRIMARY EXAMINER**